

### **Amendments to the claims**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A method of enhancing an immune response to an antigen in a mammal, comprising administering to the mammal a safe and effective amount of 1) an IL-18 polypeptide or bioactive fragment or variant thereof, and 2) an immunogenic composition comprising an antigen or immunogenic derivative thereof and a saponin adjuvant.

2. (Currently amended) A method according to claim 2, wherein the antigen or immunogenic derivative thereof is derived from an organism selected from the ~~following~~ group: of: Human Immunodeficiency virus HIV-1, human herpes simplex viruses, cytomegalovirus, Rotavirus, Epstein Barr virus, Varicella Zoster Virus, from a hepatitis virus such as hepatitis B virus, hepatitis A virus, hepatitis C virus and hepatitis E virus, from Respiratory Syncytial virus, parainfluenza virus, measles virus, mumps virus, human papilloma viruses, flaviviruses or Influenza virus, from *Neisseria* spp, *Moraxella* spp, *Bordetella* spp; *Mycobacterium* spp., including *M. tuberculosis*; *Escherichia* spp, including enterotoxigenic *E. coli*; *Salmonella* spp.; *Listeria* spp; *Helicobacter* spp; *Staphylococcus* spp., including *S. aureus*, *S. epidermidis*; *Borrelia* spp; *Chlamydia* spp., including *C. trachomatis*, *C. pneumoniae*; *Plasmodium* spp., including *P. falciparum*; *Toxoplasma* spp., and *Candida* spp.

3. (Currently amended) A method of reducing the severity of a cancer in a patient, comprising administering to a patient in need thereof a safe and effective amount of 1) an IL-18 polypeptide or bioactive fragment or variant thereof and 2) an immunogenic composition comprising a tumour-associated antigen or immunogenic derivative thereof and a saponin adjuvant.

4. (Currently amended) A method according to claim 3, wherein the tumour-associated antigen or immunogenic derivative thereof is selected from the group ~~comprising~~: of: an antigen from the MAGE family, PRAME, BAGE, LAGE 1, LAGE 2, SAGE, HAGE, XAGE, PSA, PAP, PSCA, prostatein, P501S, HASH2, Cripto, B726, NY-BR1.1, P510, MUC-1, Prostase, STEAP, tyrosinase, telomerase, survivin, CASB616, P53, ~~or~~ and her 2 neu.

5. (Currently amended) A The method according to ~~any of~~ claims 1 ~~to~~ 4, wherein the IL-18 polypeptide or bioactive fragment or variant thereof and the immunogenic composition are administered simultaneously, separately or sequentially in any order.

6. (Currently amended) A ~~The~~ method according to claim 5 wherein ~~the~~ the ~~TH-1 cytokine~~ IL-18 polypeptide or bioactive fragment or variant thereof and the immunogenic composition are administered simultaneously in the form of a combined pharmaceutical preparation.

7. (Currently amended) A The method according to ~~any of~~ claims 1 ~~to~~ 6, wherein the IL-18 polypeptide or bioactive fragment or variant thereof is from human or murine origin.

8. (Currently amended) A ~~The~~ method according to claim 7, wherein IL-18 is the polypeptide of SEQ ID NO:6 or SEQ ID NO:7 or bioactive fragment or derivative thereof.

9. (Currently amended) A The method according to ~~any of~~ claims 1 ~~to~~ 8, wherein the saponin adjuvant is chosen from the group of: QS-21 or and QS-17.

10. (Original) A combined preparation comprising as active ingredients the following individual components: (1) IL-18 polypeptide or bioactive fragment or variant thereof and (2) immunogenic composition comprising an antigen and a saponin adjuvant, the active ingredients being for the simultaneous, separate or sequential use for the prophylaxis and/or treatment of infectious diseases, cancer, autoimmune diseases and related conditions.

11. (Currently amended) A The combined preparation according to claim 10, wherein components (1) and (2) are admixed in a composition.

12. (Currently amended) A The combined preparation according to claim 10, ~~or 11~~ wherein the immunogenic composition comprises a tumour-associated antigen or immunogenic derivative thereof and is prophylactically or therapeutically active against cancer.

13. (Currently amended) A The combined preparation according to claim 12, wherein the tumour-associated antigen or immunogenic derivative thereof is selected from the group ~~comprising of~~: an antigen from the MAGE family, PRAME, BAGE, LAGE 1, LAGE 2, SAGE, HAGE, XAGE, PSA, PAP, PSCA, prostatein, P501S, HASH2, Cripto, B726, NY-BR1.1, P510, MUC-1, Prostase, STEAP, tyrosinase, telomerase, survivin, CASB616, P53, ~~or~~ and her 2 neu.

14. (Currently amended) A The combined preparation according ~~to any of~~ claims 10 ~~to 13~~, wherein the IL-18 polypeptide or bioactive fragment or variant thereof is from human or murine origin.

15. (Currently amended) A The combined preparation according to claim 14, wherein IL-18 is the polypeptide of SEQ ID NO:6 or SEQ ID NO:7 or bioactive fragment or derivative thereof.

16. (Currently amended) A The combined preparation according ~~to any of~~ claims 10 ~~to 16~~, wherein the saponin adjuvant is chosen from the group of: QS-21 ~~or~~ and QS-17.

17. (Currently amended) ~~Combined~~ The combined preparation as claimed in ~~any of claims 10 to 16 in which~~ , wherein the immunogenic composition additionally comprises an immunostimulant chemical selected from the group ~~comprising of~~: 3D-MPL, cholesterol, CpG oligonucleotide containing at least one immunostimulatory CG dinucleotide, aluminium hydroxide, aluminium phosphate, and tocopherol, and an oil in water emulsion or a combination of two or more of the said adjuvants.

18. (Currently amended) ~~Combined~~ The combined preparation as claimed in claim 17, wherein the immunogenic composition adjuvant comprises 3D-MPL, QS21, cholesterol, an oil in water emulsion.

19. (Currently amended) ~~Combined~~ The combined preparation as claimed in claim 18, wherein the oil in water emulsion comprises squalene, tocopherol, and polyoxyethylenesorbitan monooleate (Tween 80).

20. (Currently amended) ~~Combined~~ The combined preparation as claimed in claim 17, wherein the immunogenic composition comprises QS21, cholesterol, and a CpG oligonucleotide containing at least one immunostimulatory CG dinucleotide.

21. (Currently amended) ~~Combined~~ The combined preparation as claimed in ~~any of claims 10 to 20~~, wherein both active components are in the form of injectable solutions.

22. (Currently amended) A pharmaceutical kit comprising as active ingredients ~~the following individual components~~: (1) an IL-18 polypeptide or bioactive fragment thereof; and (2) an immunogenic composition comprising an antigen or immunogenic derivative thereof and a saponin adjuvant, the active ingredients being for the simultaneous, separate or sequential use for the prophylaxis and/or treatment of infectious diseases, cancer, and auto-immune diseases.

23. (Currently amended) A The pharmaceutical kit according to claim 22, wherein the immunogenic composition comprises a tumour-associated antigen or immunogenic derivative thereof and is prophylactically or therapeutically active against cancer.

24. (Currently amended) A The pharmaceutical kit according to claim 23, wherein the tumour-associated antigen or immunogenic derivative thereof is selected from the group ~~comprising of~~: an antigen from the MAGE family, PRAME, BAGE, LAGE 1, LAGE 2, SAGE, HAGE, XAGE, PSA, PAP, PSCA, prostein, P501S, HASH2, Cripto, B726, NY-BR1.1, P510, MUC-1, Prostase, STEAP, tyrosinase, telomerase, survivin, CASB616, P53, ~~or~~ and her 2 neu.

25. (Currently amended) A The combined preparation as claimed in ~~any of claims 10 to 20~~ for use in ~~medicine~~ medicine.

26. (Currently amended) A The method as claimed in ~~any of claims 1 to 9~~, which comprises the use of a combined preparation according to ~~any of claims 10 to 20~~.

27.-32. (Cancelled).

33. (New) A method for the prophylaxis and/or treatment of a patient suffering from or susceptible to infectious diseases, cancer, autoimmune diseases and related conditions, and already primed with an immunogenic composition, comprising an antigen or immunogenic derivative thereof and a saponin adjuvant, comprising administering to the patient a safe and effective amount of an IL-18 polypeptide or bioactive fragment or variant thereof.

34. (New) A method for the prophylaxis and/or treatment of a patient suffering from or susceptible to infectious diseases, cancer, autoimmune diseases and related conditions, and already primed with an immunogenic composition, comprising an antigen or immunogenic derivative thereof and a saponin adjuvant, comprising administering to the patient a safe and effective amount of an IL-18 polypeptide or bioactive fragment or variant thereof.

35. (New) The method according to claims 33, wherein the antigen is a tumour-associated antigen, and the cancer is selected from the group ~~comprising of~~: breast cancer, lung cancer, NSCLC, colon cancer, melanoma, ovarian cancer, bladder cancer, head and neck squamous carcinoma, and ~~oesophagus~~ esophageal cancer.

36. (New) The method according to claim 33, wherein the IL-18 polypeptide or bioactive fragment or variant thereof is from human or murine origin.

37. (New) The method according to claim 36, wherein IL-18 is the polypeptide of SEQ ID NO-6 or SEQ ID NO.7 or bioactive fragment or derivative thereof.

38. (New) The method according to any claim 33, wherein the saponin adjuvant is chosen from the group of: QS-21 and QS-17.